## CITY OF KENT POSITION DESCRIPTION

Position Inventory Number: <u>PW888</u>
Classification Specification: Engineer I
Salary Range: NR 35 - Management Benefits Level C
Position Description: <u>Environmental Engineer I</u>
Incumbent:
Location: Public Works - Engineering/Environmental

#### **GENERAL PURPOSE:**

Under the direction of the Environmental Engineering Supervisor, or designee, design and prepare construction plans for Public Works storm, creek, and wetland improvement and restoration projects; prepare cost estimates; and provide engineering and technical assistance.

Work is characterized by entry-level civil and environmental engineering responsibilities in support of the Environmental Section of the Engineering Division. Duties include, but are not limited to, designing and/or preparing project plans and specifications; preparing cost estimates; ensuring project designs and construction are in compliance with legal parameters; analyzing system requirements; serving as liaison between the City and consultants; providing technical assistance in the updating and maintenance of City construction standards; maintaining the City's stormwater standards; and investigating and resolving complaints as assigned.

Work is performed under general supervision. The supervisor defines objectives, priorities, and deadlines; and assists incumbent with unusual situations, which do not have clear objectives or precedents. The incumbent plans and carries out assignments and handles problems and deviations in accordance with instructions, policies, procedures, and/or accepted practices. Work is evaluated for technical soundness and conformity to practice and policy.

# ESSENTIAL DUTIES AND RESPONSIBILITIES:

Design and prepare construction documents for Public Works stormwater, flood management and critical area improvement, restoration, and mitigation projects in accordance with established standards of safety, efficiency, and cost effectiveness. The incumbent may provide guidance and direction to technical or administrative staff as needed to accomplish the projects assigned.

Prepare project plans and specifications, including drafting as needed; analyze project requirements, physical location, and other pertinent data; perform all required engineering calculations for designs using available computer programs; prepare engineer's estimate of cost; assure that project designs are in compliance with a variety

of state, federal, and city laws, codes, ordinances, and regulations governing construction projects.

Visit construction sites to inspect work progress and coordinate communications with the construction engineer during construction.

Prepare internal and external correspondence as needed, including reports, memorandums, and presentation materials for the City Council and Council Committees.

Prepare preliminary scope of work, budgets, and request for proposals (RFPs) on environmental projects; and assist in the selection of private consultants used.

Coordinate with consultants to develop stormwater capital improvement programs; work with management to prioritize corrective measures; communicate priorities with consultants; and work with consultants to implement corrective measures.

Provide assistance as needed in the technical review of stormwater plans for the construction of Public Works facilities and private improvements submitted to the City as part of the development process.

Provide assistance for detailed and complex engineering studies, designs, and field inspections of hydraulic and hydrologic work and corrective stormwater management systems.

Communicate in person and on the telephone with City personnel, consultants, developers, contractors, utilities, other agencies, property owners, and the public to exchange information, resolve conflicts, and assist them by providing technical assistance as needed.

Investigate complaints of stormwater problems and make recommendations to solve identified problems; and work closely with other Public Works personnel to solve complex stormwater problems.

Provide engineering and technical assistance on stormwater management issues and make recommendations.

Visit sites and perform field work including water quality monitoring and sampling.

Participate in various technical committees, study groups, and taskforces as needed; attend a variety of meetings including staff meetings as necessary; develop and deliver oral presentations including public presentations related to stormwater issues or other assigned projects as required; and represent the Environmental Engineering Section at public meetings as assigned.

Document and update the City's stormwater drainage system maintenance requirements for the City's Public Works Construction Standards.

Position Description: Environmental Engineer I

Page 3 of 6

Provide input into the City's Geographic Information System (GIS) for public and private stormwater drainage and treatment systems.

Provide support on assigned projects and citywide compliance with the requirements of the Endangered Species Act.

Maintain various files and records related to project status and computations; prepare project descriptions and progress reports as requested.

Coordinate and prepare applications for all permits and public notice related to Public Works projects.

Actively support and promote the vision, mission, values, and behavior statements of the department and the City

## PERIPHERAL DUTIES:

Perform related duties as assigned.

KNOWLEDGE, SKILLS, AND ABILITIES:

#### KNOWLEDGE OF:

- Hydrology, hydraulics, stream flow, and precipitation measurements
- Applicable environmental and municipal government regulations, ordinances, laws, codes, construction standards, policies, structure, and procedures
- Washington State Department of Ecology Stormwater Management Manual for Western Washington; City of Kent Construction Standards; City of Kent and King County Surface Water Design Manuals; WSDOT Standard Specifications
- Principles, practices, standards, and methods of Civil and Environmental Engineering
- Design, engineering, and construction of Public Works projects
- Advanced mathematics including calculus, trigonometry, geometry, and algebra
- Surveying principles and techniques including legal descriptions
- Identification of wetland plants, invasive species, animals, and endangered species
- Wetland monitoring to meet agency requirements
- Preparation of construction drawings and specifications
- Modern office practices, procedures, and equipment including personal computers and related software such as word processing, spreadsheet, and technical engineering programs
- Engineering research, analysis, and problem solving methods
- Correct usage of English grammar, spelling, punctuation, and vocabulary
- Interpretation of aerial photography
- Sampling techniques and laboratory analysis
- Proper usage and maintenance of probes and other measuring instruments
- Computer stormwater software models

Position Description: Environmental Engineer I Page 4 of 6

## SKILLED IN:

 Designing Public Works projects in accordance with budget limitations and established safety standards

- Designing storm sewers, water mains, sanitary sewers, streets, sidewalks, and other projects
- Making extensive mathematical computations accurately
- Effectively using interpersonal skills in a tactful, patient, and courteous manner
- Effectively using oral and written communications
- Using proper telephone techniques and etiquette to assist a diverse assortment of individuals and inquiries

### **ABILITY TO:**

- Analyze, prepare, and review technical engineering plans, drawings, specifications, and estimates for stormwater related projects
- Prepare clear and concise project plans and bid specifications
- Perform stormwater controls and enhancements
- Define problems; collect, analyze, and organize data; establish facts; and draw valid conclusions
- Coordinate engineering projects and assist in resolving conflicts with other departments, agencies, and organizations
- Analyze situations accurately and adopt an effective course of action
- Establish and maintain effective working relationship with others
- Plan and organize work to meet schedules and timelines
- Read, analyze, interpret, and explain technical procedures, governmental regulations, engineering plans, drawings, and specifications
- Write reports, business correspondence, and procedure manuals; maintain records
- Effectively present information and respond to questions from groups of managers, contractors, developers, engineers, and the general public
- Use learned knowledge and common sense to interpret and apply an extensive variety of technical instructions in oral, written, mathematical, or diagram form
- Perform project construction inspection as required

### EDUCATION AND EXPERIENCE REQUIRED:

Education: Bachelors of Science degree in Civil or Environmental Engineering or related field with no experience required; or Engineer in Training (EIT) certification and two years of technical civil or environmental engineering experience;

Or: In place of the above requirements, the incumbent may possess any combination of relevant education and experience which would demonstrate the individual's knowledge, skill and ability to perform the essential duties listed above

### LICENSES AND OTHER REQUIREMENTS:

 Valid Washington State driver's license, or the ability to obtain within thirty (30) days of employment

• Must successfully pass the City's pre-employment driver's records check; complete the City's Defensive Driving Course; and maintain an excellent driving record

## MACHINES, TOOLS, AND EQUIPMENT USED:

Typical business office machinery and equipment including, but not limited to, personal computer and related software such as computer aided drafting, word processing, spreadsheet programs, dry line printer, printing and lettering machines, telephone, facsimile, copier, calculator, digital camera, and projector.

In addition, the incumbent may be required to operate a City vehicle to travel from site to site for investigations or site inspections.

### PHYSICAL DEMANDS:

The physical demands described herein are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

While performing the duties of this job, the employee is regularly required to use arms, hands and fingers to reach, handle, feel, or operate objects, materials, tools, equipment or controls. Frequently required to sit, stand, walk, hear and talk normally with or without mechanical assistance. Occasionally required to lift in excess of 30 pounds. Specific vision abilities required by this job include close, distance, color and peripheral vision; depth perception; and the ability to adjust focus.

### WORKING CONDITIONS:

Work is performed in a typical engineering office environment. While performing the duties of this job, the employee is occasionally required to drive to various locations within the City to review public improvement projects or investigate complaints; is occasionally exposed to outdoor weather conditions; and may be exposed to individuals who are irate or hostile. The noise level in the work environment is usually moderately quiet. The noise level at construction sites may be from moderate to loud.

Position Description: Environmental Engineer I				Page 6 of 6	
SIGNATUR	ES:				
Incumbent's Signature		Date	Supervisor's Signature	Date	
Approval:					
Departmer	nt Director/Designee	Date	Employee Services Director	Date	
** Note:	This document will be reviewed and updated annually at the time of the employee's performance appraisal; when this position becomes vacant; or, if the duties of this position are changed significantly.				

Revised: 7/13/09